Cameron et al. U.S.S.N. 10/082,767 Page 2

This listing of claims will replace all prior versions of claims in the application.

Claims 1-34. (cancelled)

- Claim 35. (new) A method for forming a photoresist relief image on a substrate comprising:
- (a) applying a coating layer of a photoresist composition on a substrate, the photoresist composition comprising a resin and a photoacid generator system, the system comprising a sensitizer compound and one or more photoacid generator compounds that is an iodonium or sulfonium photoacid generator compound which comprises one more cation substituents chosen from among optionally substituted naphthyl, optionally substituted thienyl and pentafluorophenyl;
- (b) exposing the photoresist coating layer to patterned activating radiation having a developing of less than about 200 nm and developing the exposed photoresist layer to provide a relief image.
- Claim 36. (new) The method of claim 35 wherein the photoresist coating layer is exposed to radiation having a wavelength of 193 nm.
- Claim 37. (new) The method of claim 35 wherein the sensitizer is a separate component of the photoresist composition.
- Claim 38. (new) The method of claim 35 wherein the sensitizer is an aromatic compound.
- Claim 39. (new) The method of claim 35 wherein the photoacid generator compound is an iodonium compound.

- Claim 40. (new) The method of claim 35 wherein the photoacid generator compound is a sulfonium compound.
- Claim 41. (new) The method of claim 35 wherein the photoacid generator compound comprises a sulfonium compound having a sulfur cation as a ring member.
- Claim 42. (new) The method of claim 35 wherein the photoresist composition is a chemically-amplified positive photoresist.
- Claim 43. (new) A method for forming a photoresist relief image on a substrate comprising:
- (a) applying a coating layer of a photoresist composition on a substrate, the photoresist composition comprising a resin and a photoacid generator system, the system comprising a sensitizer compound and one or more photoacid generator compounds that is a non-ionic oxime sulfonate compound or a non-ionic N-oxyimidosulfonate compound;
- (b) exposing the photoresist coating layer to patterned activating radiation having a developing of less than about 200 nm and developing the exposed photoresist layer to provide a relief image.
- Claim 44. (new) The method of claim 43 wherein the photoresist coating layer is exposed to radiation having a wavelength of 193 nm.
- Claim 45. (new) The method of claim 43 wherein the sensitizer is a separate component of the photoresist composition.
- Claim 46. (new) The method of claim 43 wherein the sensitizer is an aromatic compound.

Cameron et al. U.S.S.N. 10/082,767 Page 4

- Claim 47. (new) The method of claim 43 wherein the photoacid generator compound is an oxime sulfonate compound.
- Claim 48. (new) The method of claim 43 wherein the photoacid generator compound is a N-oxyimidosulfonate compound.
- Claim 49. (new) The method of claim 43 wherein the photoresist composition is a chemically-amplified positive photoresist.